

In the specification:

Please replace the paragraph beginning on page 7, line 4, with the following paragraph:

The rasterizer 302 computes texture coordinates (u,v) for each pixel. Texturing unit 306 receives the texture coordinates (u,v) of a pixel from rasterizer 302 over line 308 and retrieves a plurality of texels from the texture memory and interpolates the pixel's texture color (RGB) from the texels values. The term "line" as used herein is intended to refer generally to functional coupling of signals between logical blocks. As such the term "line" may refer to a single physical signal, or to a plurality of signals such as a bus. Rasterizer 302 receives the pixel's texture color from texturing unit 306 over line 310. The final pixel color (RGB) together with the z-value is stored in frame buffer 312 at address (x,y). Data stored in frame buffer 312 may be subsequently used by rasterizer 302 for further operations in addition to being converted to analog form for display on a visual display unit (not shown) such as a Cathode Ray Tube (CRT) or Liquid Crystal Display (LCD). A description of two preferred embodiments of texturing unit 306 is provided below in Sections 4 and 5.

Please replace the paragraph beginning on page 13, line 9, with the following paragraph:

The system 802 includes memory banks 810 (designated individually as Bank 0, 1, 2, . . . 7), address and control unit 812, Color LookUp Table (CLUT) 814, mipmap generation unit 816, tri-linear interpolator 818 and output/comparison stage 820. The capacity of memory banks 810 sum up to 11,239,424 bits, and thus, in a preferred embodiment, a 16 Mbit DRAM technology is used. The memory system consists of four large arrays (Banks 0, 1, 2 and 3) of 274x8192 bits, holding the even levels of the

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mipmap, and four small arrays of 69x8192 bits (Banks 4, 5, 6 and 7) for the odd levels of the mipmap. Control unit 812 is advantageously pipelined and includes a plurality of Description Register Files (DRFs), explained below in Section 14. The control unit 812 generates all addresses and controls internal operation and the flow of data to and from a rasterizer such as shown in Figure 3. The tri-linear interpolator 818 is designed for a 6-bit fraction of the texture coordinates.

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Please replace the paragraph beginning on page 14, line 12, with the following paragraph:

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Address decoder 830 and CLUT 814 allow a parallel look-up of eight color values at a time. The output of CLUT 814 is coupled via lines 832 to the input of tri-linear interpolator 818. Lines 828, as mentioned above, are also coupled to the input of tri-linear interpolator 818, allowing a bypass of CLUT 814 in instances where the contents of memory banks 810 hold true color data as opposed to addresses for CLUT 814. Tri-linear interpolator 818 performs a tri-linear interpolation and provides a color value to output and combination stage 820 which implements the functions described below in sections 6-10. The output of the stage 820 is coupled to the rasterizer 302.

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